

19. (Currently amended) An article ~~having at least one surface covered by a superabsorbent polymer coating at least partially coated~~ comprising:

- a) ~~an article at least a first surface being at least partially coated with a superabsorbent polymer coating;~~
- b) ~~the superabsorbent polymer coating including: an aqueous coating composition that covers at least one surface of said article; said aqueous coating composition comprising:~~
 - 1) ~~a dried and cured water-soluble superabsorbent polymer precursor in aqueous solution, the superabsorbent polymer precursor in aqueous solution being dried and cured when exposed to a temperature within a range of temperatures that permits the superabsorbent polymer coating formed therefrom to absorb water when it is wetted and to desorb water when it is dried; and~~
 - 2) ~~an optional a viscosity modifying agent; and~~
 - 3) ~~wherein said aqueous coating composition is cured on said article to from said superabsorbent polymer coating on at least one surface of said article.~~

20. (Previously presented) The article according to claim 19 wherein said article is selected from the group of articles consisting of tapes, mats, fabrics, rovings, fibrous strands, laminates, sheets, rods and cables.

21. (Previously presented) The article according to claim 19 wherein said article is selected from the group of articles consisting of molded articles, woven fabrics, scrims, wood and paper products, and construction materials.

22. (Previously presented) The article according to claim 19 wherein said article comprises a fibrous reinforcing material.

23. (Previously presented) The article according to claim 22 wherein said fibrous reinforcing material is selected from the group of reinforcing fibers consisting of glass fibers, polymer fibers, carbon fibers, natural fibers, and blends thereof.

24. (Previously presented) The article according to claim 23 wherein said reinforcing fibers comprise polymer fibers selected from the group consisting of aramid fibers, nylon fibers, Kevlar fibers, polyester fibers, polyethylene fibers, polypropylene fibers, and combinations thereof.

25. (Previously presented) The article according to claim 24 wherein said polymer fibers comprise aramid fibers.

26. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating is corrosion resistant.

27. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating is water resistant.

28. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating absorbs water when immersed in an aqueous environment and desorbs said water when said coating is dried.

29. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating absorbs up to about 400 times its initial dry weight in water when immersed in an aqueous environment and desorbs said water when said coating is dried.

30. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating has a swell rate of from about 50 grams of deionized water per gram of dry coating to about 340 grams of deionized water per gram of dry coating in the first minute.

31. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating has a swell rate of from about 33 grams of salt water per gram of dry coating to about 66 grams of salt water per gram of dry coating in the first minute.

32. (Previously presented) The article according to claim 31 wherein said superabsorbent polymer coating has a swell rate of about 126 grams of water per gram of dry coating and about 50 grams of salt water per gram of dry coating in the first minute.

33. (Previously presented) The article according to claim 19 with said aqueous coating composition further comprising a binder.

34. (Previously presented) The article according to claim 33 wherein said binder is selected from a group of binders consisting of polyesters, polyurethanes, epoxies, latex, and mixtures thereof.

35. (Previously presented) The article according to claim 33 wherein said binder is a film-forming binder.

36. (Previously presented) The article according to claim 35 wherein the film-forming binder is a polyurethane.

37. (Previously presented) The article according to claim 19 with said aqueous coating composition further comprising a lubricant.

38. (Previously presented) The article according to claim 19 wherein the viscosity-modifying agent is selected from the group of viscosity-modifying agents consisting of alkyl celluloses, acrylamide polymers and mixtures thereof.

39. (Previously presented) The article according to claim 38 wherein the viscosity-modifying agent is an acrylamide polymer.

40. (Previously presented) The article according to claim 19 with said aqueous coating composition further comprising a wetting agent.

41. (Previously presented) The article according to claim 19 wherein said water-soluble superabsorbent polymer precursor is selected from the group of anionic salt forms of the polymer precursor consisting of anionic alkali salt polymer precursors and alkali metal salt polymer precursors.

42. (Previously presented) The article according to claim 41 wherein said water-soluble superabsorbent polymer precursor is an anionic polyacrylate.

43. (Previously presented) The article according to claim 19 wherein said superabsorbent polymer coating covers the entire surface of the article.

44. Cancelled.

45. Cancelled.

46. Cancelled.

47. (New) The article according to claim 19 wherein said range of temperatures includes a range of from about 200° F (93° C) to about 280° F (138° C).

48. (New) The article according to claim 19 wherein said temperature includes about 280° F (138° C).

49. (New) The article according to claim 19 wherein said water-soluble superabsorbent polymer precursor in aqueous solution is exposed to a temperature of about 200° F (93° C) to volatize a substantial portion of an aqueous carrier of said aqueous solution, and is further exposed to a temperature of about 280° F (138° C) to cure the water-soluble superabsorbent polymer precursor.

50. (New) An article at least partially coated comprising:

at least one surface at least partially coated with a superabsorbent polyacrylate polymer coating that absorbs water when it is wetted and desorbs water when it is dried, the superabsorbent polyacrylate polymer coating including:

a dried and cured water-soluble superabsorbent polyacrylate polymer precursor in aqueous solution;

a viscosity-modifying agent;

a lubricant; and

a film forming binder in aqueous solution, said film forming binder selected from the group consisting of polyesters, polyurethanes, epoxies, latex and mixtures thereof.

51. (New) The article of claim 50 wherein the superabsorbent polyacrylate polymer precursor in aqueous solution is dried and cured when applied to said at least first surface and exposed to a temperature within a range of temperatures that permits the superabsorbent polymer coating formed therefrom to absorb water when it is wetted and to desorb water when it is dried.

52. (New) The article according to claim 50 wherein said article is selected from the group of articles consisting of tapes, mats, fabrics, rovings, fibrous strands, laminates, sheets, rods and cables.

53. (New) The article according to claim 50 wherein said article is selected from the group of articles consisting of molded articles, woven fabrics, scrims, wood and paper products, and construction materials.

54. (New) The article according to claim 50 wherein said article comprises a fibrous reinforcing material.

55. (New) The article according to claim 54 wherein said fibrous reinforcing material is selected from the group of reinforcing fibers consisting of glass fibers, polymer fibers, carbon fibers, natural fibers, and blends thereof.

56. (New) The article according to claim 55 wherein said reinforcing fibers comprise polymer fibers selected from the group consisting of aramid fibers, nylon fibers, Kevlar fibers, polyester fibers, polyethylene fibers, polypropylene fibers, and combinations thereof.

57. (New) The article according to claim 56 wherein said polymer fibers comprise aramid fibers.

58. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating is corrosion resistant.

59. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating is water resistant.

60. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating absorbs water when immersed in an aqueous environment and desorbs said water when said coating is dried.

61. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating absorbs up to about 400 times its initial dry weight in water when immersed in an aqueous environment and desorbs said water when said coating is dried.

62. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating has a swell rate of from about 50 grams of deionized water per gram of dry coating to about 340 grams of deionized water per gram of dry coating in the first minute.

63. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating has a swell rate of from about 33 grams of salt water per gram of dry coating to about 66 grams of salt water per gram of dry coating in the first minute.

64. (New) The article according to claim 63 wherein said superabsorbent polyacrylate polymer coating has a swell rate of about 126 grams of water per gram of dry coating and about 50 grams of salt water per gram of dry coating in the first minute.

65. (New) The article according to claim 50 wherein said viscosity-modifying agent is selected from the group of viscosity-modifying agents consisting of alkyl celluloses, acrylamide polymers and mixtures thereof.

66. (New) The article according to claim 50 wherein said viscosity-modifying agent is an acrylamide polymer.

67. (New) The article according to claim 50 wherein said superabsorbent polyacrylate polymer coating further comprising a wetting agent.

68. (New) The article according to claim 50 wherein said water-soluble superabsorbent polyacrylate polymer precursor is selected from the group of anionic salt forms of the polymer precursor consisting of anionic alkali salt polymer precursors and alkali metal salt polymer precursors.

69. (New) The article according to claim 50 wherein said superabsorbent polymer coating covers an entire surface of the article.

REMARKS

To further prosecution of the present application, Applicants have amended claim 19, cancelled claims 44-46 and added new claims 47-69. Claims 19-43 and 47-69 are presently pending with claims 19 and 50 being in independent format. Applicants have carefully considered the Examiner's Action and provide the following response.